

WIRELESS MODEM

Abstract

A modem includes a base unit for transmitting a data
5 signal having substantially no nonlinear distortion, and a
communication card which receives the data signal from the
base unit over a wireless medium and which performs echo
canceling on the data signal. The base unit is in
communication with a telephone line and receives an
10 original signal from the telephone line. The base unit
generates an RF modulated signal based on the original
signal. The base unit includes a transmitter for
transmitting the data signal. Circuitry in the base unit
receives the original signal from the telephone line and
15 generates the data signal from the original signal by
maintaining a peak voltage excursion of combined original
and echo signals within a linear amplification region of
the transmitter.